DECISION

SUPPLEMENT TO THE ENVIRONMENTAL ASSESSMENT: INTEGRATED MANAGEMENT OF COYOTE, RED FOX, FERAL DOG, WOLF-HYBRID, AND EXOTIC CARNIVORE PREDATION ON LIVESTOCK IN THE STATE OF WEST VIRGINIA

I. PURPOSE

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program has prepared an Environmental Assessment (EA) to analyze the potential environmental and social impacts to the quality of the human environment from resolving damage and threats associated with coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), feral dogs (*Canis familiaris*), wolf-hybrids (*Canis* spp.) and exotic carnivores to livestock when requested in West Virginia (USDA 2002). The EA documents the need for canid damage management and assesses potential impacts on the human environment of six alternatives to address that need. After consideration of the analysis contained in the EA and review of public comments, a Decision and Finding of No Significant Impact (FONSI) for the EA was issued on May 15, 2002. The Decision and FONSI selected the proposed action alternative which implemented an integrated damage management program using multiple methods to adequately address the need to manage predation associated with canids.

Purpose of the Supplement to the EA

The supplement to the EA analyzes the affected environment and potential impacts as it relates to the need for an increase in damage management activities to address increasing threats of predation associated with coyotes, red fox, feral dogs, wolf-hybrids, and exotic carnivores. Prior to and during the development of the EA, WS was providing direct operational assistance to livestock producers requesting assistance in approximately ten counties. In federal fiscal year (FY) 2007, the number of counties requesting assistance increased from ten to 20 counties. In FY 2008, WS was requested to provide assistance for canid damage management to livestock in all 55 counties. This has lead to an increase in requests for assistance in areas where WS had not provided damage management assistance previously. In addition, the statewide inventory of meat goats has increased recently. Meat goats and their offspring are vulnerable to predation and requests for assistance to manage predation threats to goats have increased.

The supplement to the EA evaluates the use of non-lethal and lethal methods to address the increasing threats associated with coyotes, including the potential for increased take of coyotes under the proposed action alternative. The supplement to the EA was prepared to examine potential environmental impacts of the proposed action alternative based on new information that has become available from public comments, research findings, and data gathering since the issuance of the Decision and FONSI in 2002 along with new methods that have become available since the Decision for the EA was issued. WS has also been requested to participate in disease surveillance and monitoring programs involving canids. In addition, the supplement communicates to the public the analysis of individual and cumulative impacts of the proposed action alternative since 2002 and documents the analyses of WS' canid damage management activities in West Virginia since the Decision/FONSI was issued in 2002 to ensure program activities remain within the impact parameters analyzed in the EA. This new Decision is based on the analyses in the EA, the 2002 Decision/FONSI, and the proposed supplement to the EA.

II. NEED FOR ACTION

The need for action to manage livestock predation associated with canids arises from requests for assistance received by WS which was addressed in the EA. The need for action to manage livestock

predation remains as addressed in the EA and remains applicable to the supplement to the EA. WS continues to receive requests for both operational assistance and technical assistance from those persons experiencing livestock predation or threats of predation.

The need for action associated with the supplement to the EA arises from the need to address an increasing number of requests for assistance to manage livestock predation associated with coyotes. As the number of requests for assistance to manage predation increases, the total number of coyotes addressed by WS to resolve those requests for assistance also increases. The supplement to the EA evaluates the proposed action alternative as the alternative relates to the increasing need to manage predation and threats of predation associated with coyotes.

III. OBJECTIVES

The EA identified five objectives for canid damage management conducted by WS (USDA 2002). Those objectives established in the EA have been achieved every year since the implementation of the proposed action alternative using an integrated approach to addressing livestock predation associated with canids.

IV. RELATIONSHIP TO OTHER ENVIRONMENTAL DOCUMENTS

The relationships of the EA and the supplement to other documents that address wildlife damage management were also discussed in the EA and the supplement. WS' programmatic Final Environmental Impact Statement (FEIS) contains detailed discussions of potential impacts to the human environment from wildlife damage management methods used by WS (USDA 1997). Pertinent information available in the FEIS was incorporated by reference into the EA and the supplement to the EA.

V. DECISIONS TO BE MADE

Based on the scope of the EA and the supplement, the decisions to be made are: 1) should WS continue to conduct canid damage management to alleviate and prevent predation on livestock, 2) should WS conduct disease surveillance and monitoring in the canid populations when requested, 3) should WS continue to implement a management strategy using an integrated methods approach, including technical assistance and direct operational assistance, to meet the need to reduce canid predation on livestock, 4) if not, should WS attempt to implement one of the alternatives to an integrated management strategy as described in the EA, and 4) would continuing the proposed action alternative, as supplemented, result in adverse impacts to the environment requiring the preparation of an Environmental Impact Statement (EIS) based on activities conducted since the completion of the EA and/or based on new information available.

VI. RELATIONSHIP OF AGENCIES

The management of coyotes and red fox is the responsibility of the West Virginia Division of Natural Resources (WVDNR). The take of coyotes and red fox can only occur when authorized by the Director of the WVDNR. Feral dogs, wolf-hybrids, and exotic carnivores are unregulated species and can be managed without authorization from the WVDNR. WS has statutory authority to manage wildlife damage. Direct operational assistance is only provided by WS when requested by a property owner or manager and only when authorized by the WVDNR.

VII. SCOPE OF ANALYSIS

The EA evaluates canid damage management under six alternatives to reduce threats of livestock predation wherever such management is requested by a cooperator. The analyses in the EA are intended to apply to any action taken by WS to alleviate predation or threats of predation associated with canids

that may occur in any locale and at any time within West Virginia. The EA emphasizes major issues as they relate to specific areas; however, the issues addressed apply wherever predation and the resulting management activities would occur. The standard WS Decision Model (Slate et al. 1992, USDA 1997, USDA 2002) would be the site-specific procedure for individual actions conducted by WS. The supplement adds to the analysis in the EA and the 2002 Decision/FONSI. The information and analyses in the EA remain valid unless otherwise noted.

The WVDNR has jurisdiction over the management of coyotes and red fox and has specialized expertise in identifying and quantifying potential adverse effects to the human environment from management activities. Coyotes and red fox can be harvested during regulated hunting and trapping seasons. Coyotes can be lethally taken using hunting methods during a continuously open season with no limit on the number that can be harvested. In addition, the take of red fox can occur when authorized by the Director of the WVDNR which allow fox to be taken to alleviate damage. Take of feral dogs, wolf-hybrids, and exotic carnivores can occur at any time to alleviate damage. Any take involved with the alternatives to alleviate predation or threats of predation from coyotes or red fox would only occur when authorized by the Director of the WVDNR and only at levels permitted, when applicable.

The supplement to the EA along with the EA and the 2002 Decision/FONSI were made available for public review and comment through the publication of a legal notice announcing a minimum of a 30-day comment period. The legal notice was published in the *Charleston Daily Mail* and posted on the APHIS website located at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml according to WS' public notification requirements (72 FR 13237-13238). A letter of availability was directly mailed to agencies, organizations, and individuals with probable interest in canid damage management in West Virginia. No comments were received during the public comment period for the supplement to the EA.

VIII. AUTHORITY AND COMPLIANCE

WS is authorized by law to reduce damage caused by wildlife through the Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b), as amended and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c). The authority for management of wildlife species in West Virginia, including coyotes and red fox, is the responsibility of the WVDNR. The WVDNR collects and compiles information on trends and take of those species populations, and uses this information to manage coyote and fox populations. This information has been provided to WS to assist in the analysis of potential impacts of WS' activities conducted since the Decision for the EA was signed in 2002 and for the analyses of potential impacts from those activities addressed in the supplement to the EA.

The supplement to the EA along with this Decision ensures WS' actions comply with the National Environmental Policy Act (NEPA), with the Council on Environmental Quality (40 CFR 1500), and with APHIS' implementing regulations for the NEPA (7 CFR 372). All canid damage management activities, including disposal requirements, would be conducted consistent with federal, State, and local laws, regulations, and policies, including WS' Directives.

IX. AFFECTED ENVIRONMENT

Coyotes and red fox can be found throughout the year across the State where suitable habitat exists. Coyotes and fox are capable of utilizing a variety of habitats including rural and urban habitats. Predation or threats of predation can occur statewide where ever coyotes and red fox occur. Feral dogs, wolf-hybrids, and exotic carnivores are non-native species that originate from pet owners. Those species either escape from captivity or are released by their owners. Feral dogs are more common and often have reproducing populations. Management of predation associated with those species would only be conducted by WS when requested by a landowner or manager and only on properties where a cooperative

service agreement or other comparable document has been signed between WS and a cooperating entity. In addition, direct operational assistance would only be provided after authority has been granted by the WVDNR for those activities, either to WS or to the cooperating entity, when applicable.

X. ISSUES ANALYZED IN DETAIL

Issues related to wildlife damage management were initially identified and defined during the development of WS' programmatic FEIS (USDA 1997). Issues related to canid damage management in West Virginia were defined and preliminary alternatives were identified through consultation with the WVDNR and the West Virginia Department of Agriculture. The EA was also made available to the public for review and comment through notices published in local media and through direct notification of interested parties.

Chapter 2 of the EA describes in detail the issues considered and evaluated in the EA (USDA 2002). The following issues were identified as important to the scope of the analysis (40 CFR 1508.25) with each alternative evaluated in the EA relative to the impacts on the major issues:

- Issue 1 - Effects on target (coyote and red fox) species populations
- Issue 2 - Effects on dogs, wolf-hybrids, and exotic carnivores
- Issue 3 - Effects on non-target wildlife populations, including threatened and endangered (T&E) species
- Issue 4 - Effects on human health and safety
- Issue 5 - Humaneness of control methods used by WS
- Issue 6 - Effects on the aesthetic values of target and non-target species

Those issues identified during the development of the EA were evaluated in the supplement by each issue as those issues related to WS' activities conducted since the original Decision was signed in 2002. Each of those issues was also evaluated as those issues relate to conducting the proposed action alternative as described in the supplement to the EA.

XI. ISSUES NOT CONSIDERED IN DETAIL

In addition to those issues analyzed in detail, several additional issues were identified during the development of the EA but were not considered in detail. The rationale for the decision not to analyze those issues in detail is discussed in the EA. WS has reviewed the issues not considered in detail as described in the EA and has determined that the analysis provided in the EA has not changed and is still appropriate.

XII. ALTERNATIVES ANALYZED IN DETAIL

Six alternatives were developed to respond to the issues identified in Chapter 2 of the EA and to address the need for action discussed in Chapter 1 (USDA 2002). Chapter 4 in the EA analyzes the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on the issues. Below is a summary of the alternatives analyzed in detail.

- Alternative 1 - Technical Assistance Only
- Alternative 2 - Non-lethal Control Only
- Alternative 3 - Non-lethal Control before Lethal Control
- Alternative 4 - Lethal Control Only
- Alternative 5 - Integrated Wildlife Damage Management (Proposed Action/No Action)

- Alternative 6 - No Federal WS Predator Damage Management in West Virginia

The EA contains a detailed description and discussion of the alternatives and the effects of the alternatives on the issues identified. Appendix B of the EA provides a description of the methods that could be used or recommended by WS under each of the alternatives. The supplement to the EA provides additional discussion of methods available for use since the completion of the EA.

XIII. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Additional alternatives were also considered to address the issues but were not analyzed in detail with the rationale discussed in the EA (USDA 2002). WS has reviewed the alternatives analyzed but not in detail and determined the analyses in the EA are still appropriate for those alternatives considered.

XIV. WILDLIFE DAMAGE MANAGEMENT METHODS

Since the completion of the EA, trap monitors, Forward Looking Infrared (FLIR) devices, and night vision equipment have become available for use while conducting canid damage management activities. Those methods aid in the use of other methods or allow other methods to be applied more selectively and efficiently.

XV. STANDARD OPERATING PROCEDURES

The WS program in West Virginia uses many standard operating procedures and conducts work pursuant to WS' Directives. Standard operating procedures are discussed in detail in Chapter 5 of WS' programmatic FEIS (USDA 1997) and in Chapter 3 of the EA (USDA 2002). Those standard operating procedures would continue to be incorporated into activities conducted by WS when addressing livestock predation and threats.

XVI. ENVIRONMENTAL CONSEQUENCES FOR ISSUES ANALYZED IN DETAIL

Chapter 4 of the EA analyzes the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on those major issues identified in the EA. The proposed action/no action alternative serves as the baseline for the analysis and the comparison of expected impacts among the alternatives. The analysis also takes into consideration mandates, directives, and the procedures of WS and the WVDNR. The analyses in Chapter 4 of the EA indicate the potential impacts to the quality of the human environment would be similar across the alternatives.

Based on the analyses in the EA, the 2002 Decision determined the need for action and the issues identified in the EA were best addressed by selecting Alternative 5 and the implementation of the selected alternative would not significantly affect the quality of the human environment (USDA 2002). Between FY 2002 and FY 2010, WS has implemented a canid damage management program which responds to requests for assistance using an adaptive integrated methods approach as described under Alternative 5 in the EA. The supplement to the EA evaluates the implementation of Alternative 5 from FY 2002 through FY 2010 to ensure individual and cumulative activities conducted pursuant to the alternative continue to be within the impact parameters evaluated in the EA based on current information and methods. Potential impacts of Alternatives 1, 2, 3, and 4 on the human environment related to the major issues have not changed from those described in the EA.

The following resource values in West Virginia are not expected to be significantly impacted by any of the alternatives based on the analyses in the EA and in the supplement to the EA: soils, geology, minerals, water quality/quantity, flood plains, wetlands, critical habitats (areas listed in T&E species recovery

plans), visual resources, air quality, prime and unique farmlands, aquatic resources, timber, and range. The activities proposed in the alternatives would have a negligible effect on atmospheric conditions including the global climate. Meaningful direct or indirect emissions of greenhouse gases would not occur as a result of any of the alternatives. Those alternatives would meet the requirements of applicable laws, regulations, and Executive Orders, including the Clean Air Act and Executive Order 13514.

The following issues were analyzed in detail in the supplement as they relate to those activities conducted by WS under the selected alternative from FY 2002 through FY 2010:

Issue 1 - Effects on target (coyote and red fox) species populations

Under the proposed action alternative (Alternative 5), WS provides technical and direct damage assistance using methods described in Appendix B of the EA in an integrated approach in which all or a combination of methods may be employed to resolve a request for assistance. Of primary concern is the magnitude of take on a species' population from the use of lethal methods.

Lethal methods are employed to remove an individual canid or those canids responsible for causing damage or the threat of damage and only after requests for such assistance are received by WS. The use of lethal methods would therefore result in local population reductions in the area where damage or threats were occurring. The number of coyotes or red fox removed from the population under the proposed action would be dependent on the number of requests for assistance received, the number of coyotes or red fox involved with the associated damage or threat, and the efficacy of methods employed.

WS' lethal take of coyotes and red fox did not exceed the estimated level analyzed in the EA during all years except the number of coyotes lethally removed by WS during FY 2006, FY 2009, and FY 2010. The EA evaluated an annual lethal take level of up to 500 coyotes and 100 red fox which was based on the number of requests received prior to the development of the EA and based on anticipation of an increase in the number of requests received annually. WS' take of coyotes exceeded the level analyzed in the EA by 15 coyotes in FY 2006, by 106 coyotes in FY 2009, and 318 in FY 2010. Since WS' take has exceeded the take level analyzed in the EA for coyotes, WS prepared the supplement to further analyze an increase in the annual take of coyotes to evaluate potential cumulative impacts. The supplement evaluates the proposed action alternative as that alternative relates to an increase in coyote damage management activities, which could include an annual take of up to 1,900 coyotes as part of the integrated damage management approach.

Coyote and red fox populations in West Virginia are considered stable; however, population estimates are unavailable. Population modeling information provided in the EA and WS' programmatic FEIS suggests that a viable coyote population can withstand an annual removal of 70% of their population without causing a decline (Connolly and Longhurst 1975, Connolly 1995, USDA 1997, USDA 2002). Coyotes are considered a harvestable species and can be hunted throughout the year with no limit on the number of coyotes that can be taken. Coyotes can also be harvested during annual trapping seasons with no daily take limit or season limit. Similarly, red fox can be harvested during a regulated hunting and trapping season with no limit on the number of fox that can be harvested during the season. Red fox can also be lethally taken when causing damage through when authorized by the WVDNR.

A statewide coyote population based on available information could be estimated to range from 12,115 to 24,230 coyotes with a population estimate of 6,057 coyotes representing a worst case scenario. If the coyote population remains stable or increases annually, WS' take of up to 1,900 coyotes to alleviate damage or threats to livestock would range from 7.8% to 15.7% of the estimated population and 31.4% of the population under a worst case scenario. The highest number of coyote pelts sold to West Virginia fur dealers occurred in 2010 when 691 pelts were sold. The take of coyotes beyond that reported sold to fur

buyers is unknown. The cumulative take of coyotes by WS and other known entities would represent 10.7% to 21.4% of the estimated population and 42.8% of the population under the worst case scenario. There is no indication that the combined take by sportsman and WS has or would reach a magnitude that would cause a decline in the coyote population. The number of coyotes observed by bow hunters has remained at least stable despite take by WS and by other entities which indicate previous harvest levels have not caused a decline in the coyote population. The unlimited take allowed by the WVDNR also provides an indication that coyotes are not subject to overharvest. The WVDNR has concurred with WS' finding that coyote damage management activities would not adversely affect statewide coyote populations (R. Rogers, WVDNR, pers. comm. 2011).

The EA evaluated an annual take of up to 100 red fox as part of an integrated approach to resolving requests for assistance. WS' take of red fox to alleviate damage has averaged 18 fox annually since FY 2002. In addition, WS has lethally taken 159 red fox unintentionally during coyote damage management activities since FY 2002, which is an average of 18 fox annually. WS' combined take of fox (target and non-target take) has been 317 red fox since FY 2002. WS' annual combined take of red fox has averaged 35 fox which is below the take of 100 red fox analyzed in the EA.

Since 2003, the number of fox pelts sold to fur dealers in the State has increased annually through 2008 and population trend data for fox indicates a stable population. WS' average combined take of 35 red fox since FY 2002 would represent 3.0% of the average 1,162 red fox pelts sold annually since 2002. WS' take of red fox could be considered as a low magnitude of take when compared to the number of red fox pelts sold annually in the State. Therefore, WS' total combined take of 317 red fox since FY 2002 has not had cumulative adverse effects on statewide populations. WS' take did not adversely affect the ability of those persons interested to harvest red fox during the regulated season based on the low magnitude of take. Based on current information, WS' continued take of red fox to alleviate damage to livestock when conducted with the parameters analyzed in the EA would continue to have no adverse effect on red fox populations.

Since the completion of the EA, trap monitors, FLIR devices, and night vision equipment have become available for use while conducting canid damage management activities. Those methods aid in the use of other methods or allow other methods to be applied more selectively and efficiently. Since those methods are components of other methods, there would be no adverse effects on the populations of coyotes and red fox from the use of those methods.

Issue 2 - Effects on dogs, wolf-hybrids, and exotic carnivores

WS continues to receive requests for assistance to manage damage or threats to livestock in which feral dogs have been identified as the cause of the damage or threat of damage. WS has not received requests for assistance to resolve damage or threats of damage caused by wolf-hybrids or exotic carnivores. The lethal take of feral dogs occurred within the potential impact parameters evaluated in the EA. Program activities and their potential impacts on feral dogs, wolf-hybrids, and exotic carnivores have not changed from those analyzed in the EA.

An increase in activities and the availability of additional methods should not involve additional adverse effects on the populations of feral dogs, wolf-hybrids, and exotic carnivores. The potential for an increase in the number of feral dogs unintentionally taken due to the increase in activities to resolve coyote damage were addressed under Issue 3 in the supplement.

Issue 3 - Effects on non-target wildlife populations, including threatened and endangered (T&E) species

While every precaution is taken to safeguard against taking non-targets during operational use of methods and techniques for resolving predation, the use of such methods can result in the incidental take of unintended species. Those occurrences are minimal and should not affect the overall populations of any species. Based on current information, WS' unintentional take of non-targets from FY 2002 through FY 2010 during canid damage management activities has not adversely affected populations of those species based on the analyses in the supplement. The magnitude of WS' non-target take when compared to the harvest of those species is low, and WS' activities have not limited the ability to harvest those species during regulated hunting and trapping seasons. Take of non-targets under the proposed supplement is not expected to reach a magnitude that would cause adverse effects to those non-target populations likely to be taken during activities based on the analyses in the supplement. WS would continue to monitor annually the take of non-target species to ensure program activities or methodologies used in canid damage management do not adversely impact non-targets.

No T&E species were taken or adversely affected by WS' actions. A review of T&E species listed by the United States Fish and Wildlife Service (USFWS) showed that additional listings of T&E species in West Virginia have occurred since the completion of the EA in 2002. Based on the review of available information in the supplement to the EA, WS determined the proposed action alternative, as supplemented, would have no effect on those listed species since the completion of the EA in 2005. In addition, the use of trap monitors, night vision equipment, and FLIR equipment would have no effect on any T&E species since those methods are components of other methods. WS' determination in the EA for those listed species during the development of the EA is still valid and appropriate (USDA 2002).

Issue 4 - Effects on Human Health and Safety

WS' implementation of the proposed action from FY 2002 through FY 2010 did not result in any adverse impacts to human or pet safety. The potential impacts of program activities on human health and safety have not changed from those analyzed in the EA. Based on the analyses in the EA and WS' programmatic FEIS, when WS' activities are conducted according to WS' directives and SOPs, according to federal, state, and local laws, and to label requirements, those activities pose minimal risks to human safety (USDA 1997, USDA 2002).

Night vision equipment, FLIR equipment, and trap monitors are employed as components of other methods that when employed, allow those methods to be employed more efficiently and effectively. In addition, night vision equipment and FLIR equipment are most often employed with the use of a firearm which allows activities to be conducted at night when human activity tends to be lowest; therefore, the use of night vision equipment and FLIR equipment would not adversely affect human safety but potentially could further reduce risks. Trap monitors are attached directly to traps and would not pose a threat to human safety. Impacts of the proposed action alternative on this issue are expected to remain insignificant.

Issue 5 - Humaneness of control methods used by WS

The issue of humaneness was also analyzed in detail in relationship to the alternatives in the EA. Since many methods addressed in Appendix B of the EA are available under all the alternatives, the issue of method humaneness would be similar for those methods across all the alternatives. WS' personnel are experienced and professional in their use of management methods. When employing methods to resolve predation, methods are applied as humanely as possible. Methods used in canid management activities

since the completion of the EA and their potential impacts on humaneness and animal welfare have not changed from those analyzed in the EA.

Trap monitoring devices would be employed when applicable that indicate when a trap as been activated. Trap monitoring devices would allow personnel to prioritize trap checks and decrease the amount of time required to check traps which decreases the amount of time captured canids are restrained. By reducing the amount of time canids are restrained, pain and stress can be minimized which would reduce the distress of captured canids. Therefore, the use of trap monitoring devices proposed under the supplement would likely result in traps being used more humanely. Additionally, the use of FLIR and night vision equipment to remove canids may improve the perceived humanness of killing canids using firearms since those components would aid in identifying target species and allowing for more accurate shot placements when using firearms.

Issue 6 - Effects on the aesthetic values of target and non-target species

The EA concluded the effects on aesthetics would be variable depending on the damage situation, stakeholders' values towards canids, and their compassion for those persons who are experiencing economic losses associated with predation or threats of predation. Program activities and their potential impacts on aesthetics have not changed from those analyzed in the EA. Activities conducted by WS from FY 2002 through FY 2010 to alleviate threats posed by canids occurred at the request of cooperators seeking assistance with managing predation or threats of predation. WS' take has been minimal with the magnitude of take being low. WS' take of canids in West Virginia has not adversely affected the aesthetic value of those species.

The effects on aesthetics from an increase in the number of canids removed or the use of additional methods to remove them, as described in the supplement to the EA, would not further increase any effects on aesthetics. An increase in take of coyotes may occur under the supplement to the EA but would not significantly affect target canid populations. Therefore, the analysis in the EA remains appropriate for the proposed supplement. Native canids addressed in the EA are common and abundant in West Virginia and can be reasonably viewed outside of the damage area if efforts are made.

Night vision and FLIR equipment allow WS to address canids at night or during low light conditions when those species are the most active which allows WS to more specifically identify those canids causing damage or posing a threat of damage. If the ability of WS to identify those canids causing damage or posing a threat of damage is enhanced through the use of night vision and FLIR equipment, the number of canids addressed by WS to resolve requests for assistance is likely to be lower which further reduces concerns about the potential impacts of removal on aesthetics.

XVII. CUMULATIVE IMPACTS

No cumulative adverse effects have been identified as a result of program activities implemented over time based on analyses contained in the EA, from annual monitoring reports, or from analyses contained in the supplement. WS continues to implement an integrated damage management program that adapts to the predation situation and the species involved with causing the damage. WS only targets canids causing damage or posing a threat of predation and only after a request for assistance is received.

Since the completion of the EA, the populations of coyotes and red fox continues to show a relatively stable trend which provides some indication that WS' activities are not cumulatively impacting populations. WS' take has been and would continue to be a small component of the overall harvest of coyotes and fox which is monitored and adjusted by the WVDNR to meet management objectives for those populations. WS' activities are conducted on a small portion of the land area of the State and

although local declines in populations could occur from WS' activities, those activities would not reach a level where coyote and red fox populations would be adversely affected from those actions. Feral dogs, wolf-hybrids, and exotic carnivores are non-native species and could be considered as negatively affecting native fauna. Therefore, any reduction in populations of those non-native species could be viewed as benefitting native fauna.

The methods described in Appendix B of the EA all have a high level of selectivity and can be employed using standard operating procedures to ensure minimal impacts to non-targets species. Based on the methods available to resolve predation and predation threats, WS does not anticipate the number of non-targets taken to reach a magnitude where declines in those species' populations would occur. Therefore, take of non-targets would not cumulatively impact the populations of non-target species.

WS has received no reports or documented any adverse effects to human safety from WS' canid damage management activities conducted from FY 2002 through FY 2010. Personnel employing methods would continue to be trained to be proficient in the use of those methods to ensure the safety of the applicator and to the public. Based on the use patterns of methods, those methods would not cumulatively impact human safety. WS employs methods as humanely as possible by applying measures to minimize pain and that allow wildlife captured to be addressed in a timely manner to minimize distress. Through the establishment of WS' Directives and standard operating procedures that guide WS in the use of methods to address livestock predation, the cumulative impacts on the issue of method humaneness are minimal.

Coyote and red fox population objectives are established and enforced by the WVDNR through the regulating of take during hunting and trapping seasons after consideration of other known mortality factors. Therefore, WS has no direct impact on the status of those species' populations since all take by WS occurs at the discretion of the WVDNR. Since those persons seeking assistance could remove canids from areas where damage is occurring when authorized by the WVDNR, WS' involvement would have no effect on the aesthetic value of those species in the area where damage was occurring. When a the take of those species has been authorized by the WVDNR to a property owner and/or manager that is experiencing damage caused by canids, the removal of those species under that authority would likely occur whether WS was involved with taking those individuals or not.

XVIII. DECISION AND RATIONALE

Based on the analyses of the alternatives developed to address those issues in the EA, including individual and cumulative impacts of those alternatives, the following decision has been reached:

Decision

The information and analyses in the supplement to the EA have been carefully reviewed, including the analyses in the EA, the comments received during the public involvement processes, and the 2002 Decision/FONSI. After review and consideration, the proposed action alternative, based on the analyses in the supplement to the EA, has been determined to be environmentally acceptable by addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analyses in the EA and the supplement to the EA adequately address the identified issues which reasonably confirms that no significant impact, individually or cumulatively, to wildlife populations or to the quality of the human environment are likely to occur from the proposed activities addressed in the EA or the supplement to the EA. Therefore, the analysis in the EA, as supplemented, remains valid and does not warrant the completion of an EIS.

Based on analyses in the EA and the supplement to the EA, the issues identified are best addressed by continuing the proposed action alternative, as supplemented, and applying the associated standard

operating procedures discussed in Chapter 3 of the EA. The proposed action, as addressed in the supplement, successfully addresses (1) canid damage management using a combination of the most effective methods and does not adversely impact the environment, property, human safety, and/or non-target species, including T&E species; (2) it offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species populations; (3) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and (4) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered. Further analysis would be triggered if changes occur that broaden the scope of canid damage management activities, that affect the natural or human environment, or from the issuance of new environmental regulations.

Finding Of No Significant Impact

Based on the analyses provided in the EA, the 2002 Decision/FONSI, the annual monitoring reports, and the supplement, there continues to be no indications that WS' activities have had or would have a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an EIS should not be prepared. This determination is based on the following factors:

1. Canid damage management as conducted by WS in West Virginia would not be regional or national in scope.

2. Based on the analyses in the EA and in the supplement, the proposed action would pose minimal risk to public health and safety. Risks to the public from methods available to address livestock predation were determined to be low in a formal risk assessment (USDA 1997).

3. The proposed action, as supplemented, would continue to have no significant impact on unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas. WS' standard operating procedures and adherence to laws and regulations that govern impacts on elements of the human environment would assure that significant adverse impacts are avoided.

4. The effects on the quality of the human environment are not highly controversial. Although there may be opposition to killing wildlife, this action is not controversial in relation to size, nature, or effects. Based on consultations with the WVDNR, the proposed action, as supplemented, is not likely to cause a controversial disagreement among the appropriate resource professionals.

5. Based on the analysis documented in the EA, the supplement to the EA, and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.

6. The proposed action, as supplemented, does not establish a precedent for future actions. This action would not set a precedent for future actions that may be implemented or planned within the State.

7. No significant cumulative effects were identified in the analyses conducted in the EA and the supplement.

8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.

9. Based on a review of activities conducted under the proposed action alternative, the determination made in the EA remains appropriate to those species listed as threatened and endangered at the time the EA was completed. The supplement to the EA determined that activities conducted pursuant to the EA, as supplemented, would continue to have no effect on those species listed since the completion of the EA.

10. The proposed action has been and would continue to be in compliance with all applicable federal, State, and local laws.

Rationale

The rationale for this decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that: 1) canid damage management would only be conducted by WS at the request of landowners/managers and only after authorization has been provided by the WVDNR, when applicable, 2) management actions are consistent with applicable laws, regulations, policies and orders, and 3) no adverse impacts to the environment were identified in the analysis. As a part of this Decision, the WS program in West Virginia would continue to provide effective and practical technical assistance and direct management techniques that reduce damage.

J. McConnell — 6/29/11

John McConnell, Acting Director-Eastern Region
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Date

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